CATEGORY FOUR: MOTORIZED FLOOR CLEANING EQUIPMENT & ACCESSORIES ITEM PURCHASE DESCRIPTIONS

NSN: <u>7910-00-526-1959</u>

CLEANER, VACUUM, ELECTRIC: Shall be an explosion proof and dust ignition proof, wet/dry, electric vacuum cleaner with filter, designed for use in Class I, Group D, and Class II, Groups E, F and G atmospheres, as defined in NFPA 70, National Electric Code. Vacuum cleaner shall be UL listed and have the following characteristics:

Characteristic:	Minimum Requirement:
Stainless Steel tank	22 gauge
Tank Size	15 gal
Wet capacity	12 gal
Dry capacity	10 gal / 1.5 cu.ft.
Voltage	115 V
Airflow	120 cfm
Waterlift	69"
Power cord	14/3 50'
Filter (polypropylene cloth	3-5 cfm, 48 x 24 count weave,
or equivalent)	12.5 oz /sq yd 13.3 ply
Caster/wheel size	3" dia
Owner's / Operating manual	Included
Tool Kit(*):	Included
Hose	1-1/2" 10'
Round brush	Included
Crevice tool	Included
Extension wand	Included
Conical nozzle	Included
Floor tool	Included
Squeegee	Included

* At the supplier's option, additional tools may be included in the tool kit.

Unit of issue: EA (Each). (One (1) complete system to a package).

NSN: 7910-00-550-9111

CLEANER, VACUUM, ELECTRIC: Shall be in accordance with the following requirements and characteristics:

Type: Wet and dry pickup

Size: 10 gallons (37.9 L)

Voltage: 120 Vac, 60 Hz, single phase

Fire and Casualty Hazards: Vacuum cleaners shall meet the applicable requirements of UL 1017. Evidence of conformance with UL standards shall be a UL label(s) or listing mark(s), or a certified test report (based on tests conducted within the past two years) from an independent testing laboratory acceptable to the Government, indicating the vacuum cleaner has passed all applicable tests.

General Construction:

Each cleaner shall be complete, lubricated, and ready to operate (minor assembly is permitted). The design shall be simple in construction, shall permit easy accessibility to component parts for cleaning, inspection, adjustment, or replacement, and shall provide reliable operation. Similar component parts and assemblies of identical model number cleaners shall be fully interchangeable. Interchangeability shall not require alteration or modification.

Wet pickup: Cleaners with wet pickup capability shall be provided with an automatic shutoff mechanism and accessories required to convert the machine from wet to dry pickup.

Power switch and controllers: Each cleaner shall be provided with a quick make and break type power switch.

Power cord: The power cord assembly shall have three conductors and a three-prong attachment plug, and shall have a minimum length of 24 feet (7.32 m). The cord length shall be measured from the point

of exit from the machine to the point of entry into the attachment plug. The end user shall be responsible for providing and installing an attachment plug in accordance with local codes and insurance requirements.

Power cord storage: Each cleaner shall be provided with a means for coiling, wrapping, or otherwise storing the power cord when the cleaner is not in use.

Filtration system: The filtration system shall consist of a primary filter, wet pickup separator, and tank assembly. When employed for dry pickup, the primary filter shall be employed. When converted for liquid retrieval, the separator and automatic shutoff assembly shall take the place of the primary filter.

Dry pickup: The primary filter shall filter particulate matter 1 μ m and larger and shall retain this matter for easy disposal. This filter may be disposable. No ingested unfiltered air shall be exhausted from the cleaner.

Wet pickup: The machine shall be equipped with an effective separator, which will prevent liquids and non-particulate solid objects from passing through to the vacuum producer. An automatic shutoff assembly shall be provided which interrupts the air intake or power to the cleaner when the minimum liquid capacity is reached.

Tank: The tank shall be of stainless steel, plastic, or shall have a durable interior epoxy coating. The tank shall hold the minimum liquid capacity for the size specified before the shutoff mechanism activates and shall have a drain valve.

Mobility: The cleaner shall have a bearing-equipped wheeled chassis or bearing-equipped self-lubricating polymeric wheels mounted on the tank to provide mobility. Wheels and casters are acceptable in any combination. The cleaner shall be equipped with a handle assembly suitable for use in cleaner movement. The cleaner shall be free-wheeling and easily transportable.

Attachments: The cleaner shall be furnished with one 11-inch (279 mm) minimum length carpet tool, one 14-inch (356 mm) minimum length bare floor tool, one 14-inch (356 mm) minimum length squeegee tool, one 9-inch (229 mm) minimum length crevice tool, one 48-inch (1220 mm) minimum length wand assembly, and one 1-1/2-inch (38.1 mm) minimum inside diameter, 120-inch (3050 mm) minimum length hose assembly. The unit shall have an automatic shutoff assembly, and any necessary attachments for conversion from dry to wet pickup.

Tool construction: The attachments for all cleaners shall be fabricated from a nonferrous alloy or a suitable synthetic material. Metal tools shall be suitably plated or finished to resist corrosion and prevent marking. Bristles, squeegee strips, etc., used in the tools shall be replaceable.

Hose construction: The hose shall be fabricated from non-marking materials impervious to attack from common cleaning solutions. A swivel coupling shall be provided on the hose end attaching to the cleaner. The hose shall be able to withstand a minimum compressive load of 150 lb (667 N) applied to any portion of the hose no closer than 12 inches (305 mm) from any fitting by means of parallel flat surfaces having lengths of not more than 3 inches (76.2 mm) parallel to the axis of the hose for not less than 2 minutes. The compressive load shall cause no rupture of any portion of the hose and the resulting hose diameter shall not differ more than 1/16 inch (1.59 mm) from the diameter prior to the compressive load.

Couplings: The engaged wand, hose, and tools shall be able to withstand a tensile force of 25 lb (111 N) for 2 minutes at each coupling without separation. Couplings shall engage and release satisfactorily before and after being subjected to the 25-lb (111 N) tensile force.

Performance:

Noise: The maximum noise generated by the cleaners shall be 90 dbA for class B cleaners and 85 dbA for all others when tested in accordance with ASTM F1334.

Continuous duty: The cleaner shall be designed for continuous duty. Continuous duty is defined as constant operation for an 8-hour work day. As evidence of the continuous duty capability, the cleaner shall be capable of withstanding a continuous 10-hour run with the orifice wide open. All lubrication points except sealed bearings shall be visually checked after this run. The lubricant shall be visually examined and shall not contain any metallic particles and lubricant quantity shall be ample. Evidence of galling or similar deficiency or lack of lubrication shall be cause for rejection. The commutator(s) shall be visually examined. There shall be no evidence of burning or pitting.

Vacuum producer water lift: When tested in accordance with ASTM F558, the vacuum producer shall perform according to values listed in Table 1.

Table 1. Vacuum Producer Water Lift.

Vacuum Cleaner Type	Sealed Water Lift through a 3/4 inch (19.0 mm) Orifice	Sealed Water Lift through a 1-1/2 inch (38.1 mm) Orifice
	(19.0 mm) Orifice	(38.1 mm) Orifice

Wet/Dry	40 (1,020 mm)	8 (203 mm)

Unit of issue: EA (Each). (One (1) complete system to a package).

NSN: <u>7910-00-550-9120</u>

CLEANER, VACUUM, ELECTRIC: Shall be in accordance with the following requirements and characteristics:

Type: Wet pick-up

Size: 5 gallons

Voltage: 120 Vac, 60 Hz, single phase

Fire and Casualty Hazards: Vacuum cleaners shall meet the applicable requirements of UL 1017. Evidence of conformance with UL standards shall be a UL label(s) or listing mark(s), or a certified test report (based on tests conducted within the past two years) from an independent testing laboratory acceptable to the Government, indicating the vacuum cleaner has passed all applicable tests.

General Construction:

Each cleaner shall be complete, lubricated, and ready to operate (minor assembly is permitted). The design shall be simple in construction, shall permit easy accessibility to component parts for cleaning, inspection, adjustment, or replacement, and shall provide reliable operation. Similar component parts and assemblies of identical model number cleaners shall be fully interchangeable. Interchangeability shall not require alteration or modification.

Wet pickup: Cleaners with wet pickup capability shall be provided with an automatic shutoff mechanism and accessories required to convert the machine from wet to dry pickup.

Power switch and controllers: Each cleaner shall be provided with a quick make and break type power switch.

Power cord: The power cord assembly shall have three conductors and a three prong attachment plug, and shall have a minimum length of 24 feet (7.32 m). The cord length shall be measured from the machine to the point of entry into the attachment plug.

The end user shall be responsible for providing and installing an attachment plug in accordance with local codes and insurance requirements.

Power cord storage: Each cleaner shall be provided with a means for coiling, wrapping, or otherwise storing the power cord when the cleaner is not in use.

Filtration system: The filtration system shall consist of a primary filter, wet pickup separator, and tank assembly. When used for dry pickup, the primary filter shall be employed. When converted for liquid retrieval, the separator and automatic shutoff assembly shall take the place of the primary filter.

Dry pickup: The primary filter shall filter particulate matter 1 μ m and larger and shall retain this matter for easy disposal. This filter may be disposable. No ingested unfiltered air shall be exhausted from the cleaner.

Wet pickup: The machine shall be equipped with an effective separator which will prevent liquids and non-particulate solid objects from passing through to the vacuum producer. An automatic shutoff assembly shall be provided which interrupts the air intake or power to the cleaner when the minimum liquid capacity is reached.

Tank: The tank shall be of stainless steel, plastic, or shall have a durable interior epoxy coating. The tank shall hold the minimum liquid capacity for the size specified before the shutoff mechanism activates.

Mobility: The cleaner shall have a bearing-equipped wheeled chassis or bearing-equipped self lubricating polymeric wheels mounted on the tank to provide mobility. Wheels and casters are acceptable in any combination. The cleaner shall be equipped with a handle assembly suitable for use in cleaner movement. The cleaner shall be free-wheeling and easily transportable.

Attachments: All cleaners shall be furnished with one 11-inch (279 mm) minimum length carpet tool, one 14-inch (356 mm) minimum length bare floor tool, one 9-inch (229 mm) minimum length crevice tool, one 48-inch (1220 mm) minimum length wand assembly, and one 1-1/2-inch (38.1 mm) minimum inside diameter, 120-inch (3050 mm) minimum length hose assembly, one 14-inch (356 mm) minimum length squeegee tool, an automatic shutoff assembly, and any necessary attachments for conversion from dry to wet pickup.

Tool construction: The attachments for all cleaners shall be fabricated from a nonferrous alloy or a suitable synthetic material. Metal tools shall be suitably plated or finished to resist corrosion and prevent marking. Bristles, squeegee strips, etc., used in the tools shall be replaceable.

Hose construction: The hose shall be fabricated from non-marking materials impervious to attack from common cleaning solutions. A swivel coupling shall be provided on the hose end attaching to the cleaner. The hose shall be able to withstand a minimum compressive load of 150 lb (667 N) applied to any portion of the hose no closer than 12 inches (305 mm) from any fitting by means of parallel flat surfaces having lengths of not more than 3 inches (76.2 mm) parallel to the axis of the hose for not less than 2 minutes. The compressive load shall cause no rupture of any portion of the hose and the resulting hose diameter shall not differ more than 1/16 inch (1.59 mm) from the diameter prior to the compressive load.

Couplings: The engaged wand, hose, and tools shall be able to withstand a tensile force of 25 lb (111 N) for 2 minutes at each coupling without separation. Couplings shall engage and release satisfactorily before and after being subjected to the 25-lb (111 N) tensile force.

Performance:

Noise: The maximum noise generated by the cleaners shall be 90 dbA for class B cleaners and 85 dbA for all others when tested in accordance with ASTM F1334-12.

Continuous duty: The cleaner shall be designed for continuous duty. Continuous duty is defined as constant operation for an 8-hour work day. As evidence of the continuous duty capability, the cleaner shall be capable of withstanding a continuous 10-hour run with the orifice wide open. All lubrication points except sealed bearings shall be visually checked after this run. The lubricant shall be visually examined and shall not contain any metallic particles and lubricant quantity shall be ample. Evidence of galling or similar deficiency or lack of lubrication shall be cause for rejection. The commutator(s) shall be visually examined. There shall be no evidence of burning or pitting.

Vacuum producer water lift: When tested in accordance with ASTM F558-13, the vacuum producer shall perform according to values listed in Table 1.

Table 1. Vacuum Producer Water Lift.

Vacuum Cleaner Type	Sealed Water Lift through a 3/4 inch (19.0 mm) Orifice (inches)	Sealed Water Lift through a 1-1/2 inch (38.1 mm) Orifice (inches)	
Wet Pick-up	40 (1,020 mm)	8 (203 mm)	

Unit of issue: EA (Each), (One (1) complete system to a package).

NSN: 7910-00-550-9123

CLEANER, VACUUM, ELECTRIC: Shall be in accordance with the following requirements and characteristics:

Type: Canister

Class: Household, dry pickup only

Voltage: 115 Vac, 60 Hz, single phase

Accessories: Furnished as specified herein

UL conformance: Vacuum cleaners shall meet the applicable requirements of UL 1017. Evidence of conformance with UL standards shall be a UL label or listing mark, or a certified test report (based on

tests conducted within the past two years) from an independent testing laboratory acceptable to the Government, indicating the vacuum cleaner has passed all applicable tests.

General: Each cleaner shall be complete, lubricated, and ready to operate (minor assembly is permitted). The design shall be simple in construction, shall permit easy accessibility to component parts for cleaning, inspection, adjustment, or replacement, and shall provide reliable operation. Similar component parts and assemblies of identical model number cleaners shall be fully interchangeable. Interchangeability shall not require alteration or modification.

Type (Canister): Each cleaner shall consist of a housing, handle or grip, vacuum producer assembly, filter assembly, switch, cord assembly, and tools and attachments as specified.

Power switch: The cleaner shall be provided with a quick make-and-break type power switch.

Power cord: The power cord assembly shall have three conductors and a three-prong attachment plug except in double-insulated cleaners, wherein a power cord assembly having two conductors and a two-prong attachment plug shall be permitted. The power cord shall have a minimum length of 20 feet (6.10 m). The cord length shall be measured from the point of exit from the machine to the point of entry into the attachment plug.

Power cord storage: Each cleaner shall be provided with a means for coiling, wrapping, or otherwise storing the power cord when the cleaner is not in use.

Filter Assembly: The filter assembly shall filter particulate matter 1 μ m and larger and shall retain this matter for easy disposal. No ingested unfiltered air shall be exhausted from the cleaner. The minimum filter capacity is 200 cubic inches (3.28L). Cleaners using disposable dust bags shall be furnished with a minimum of two (2) dust bags. The dust bag shall be secured to the cleaner outlet. There shall be no sharp projections or edges in the area of dust bag expansion. All connections between the nozzle and the bag shall be dust tight. The bag may be enclosed in a shroud of plastic or other suitable synthetic material.

Housing: The housing shall contain all components of the cleaner and may provide for onboard storage of some or all the accessories. The housing shall be equipped with wheels or casters. A dolly with provisions for attachment to the cleaner may be acceptable if the housing is not wheeled. The housing shall be designed such that the cleaner will operate satisfactorily when placed on a stair tread. Shall be provided with an integral handle or a handle securely fastened to the housing. The frame shall be of rugged construction and shall be enclosed in a shroud of metal or impact resistant synthetic material. All wheels shall be non-marking.

Handle/Grip: The handle or grip shall be included for mobility purposes.

Attachments:

General: All cleaners shall be furnished with one bare floor tool, one crevice tool, one upholstery nozzle, one brush and one carpet tool. All cleaners shall be furnished with one 42-inch (1067 mm) minimum length wand assembly, and one 1-1/4-inch (31.7 mm) minimum inside diameter, 72-inch minimum length hose assembly.

Tool construction: The attachments for all cleaners shall be fabricated from a nonferrous alloy or an impact-resistant synthetic material. Metal tools shall be suitably plated or finished to resist corrosion and prevent marking. All edges shall be rounded and smooth.

Hose construction: The hose shall be fabricated from non-marking materials impervious to attack from common cleaning solutions. A coupling shall be provided on the hose end attaching to the cleaner. The hose shall be able to withstand a minimum compressive load of 150 lb (667 N) applied to any portion of the hose no closer than 12 inches (305 mm) from any fitting by means of parallel flat surfaces having lengths of not more than 3 inches (76.2 mm) parallel to the axis of the hose for not less than 2 minutes. The compressive load shall cause no rupture of any portion of the hose and the resulting hose diameter shall not differ more than 1/4 inch (6.35 mm) from the diameter prior to the compressive load.

Couplings: The engaged wand, hose, and tools shall be able to withstand a tensile force of 25 lb (111 N) for 2 minutes at each coupling without separation. Couplings shall engage and release satisfactorily before and after being subjected to the 25-lb (111 N) tensile force.

Performance:

Noise: The maximum noise generated by the cleaners shall be 85 dbA when tested in accordance with ASTM F1334-12.

Continuous duty: The motor shall be rated for 1 hour, varying duty. All lubrication points except sealed bearings shall be visually checked after this run. The lubricant shall be visually examined and shall not contain any metallic particles and lubricant quantity shall be ample. Evidence of galling or similar deficiency or lack of lubrication shall be cause for rejection. The commutator(s) shall be visually examined. There shall be no evidence of burning or pitting.

Vacuum producer water lift: When tested in accordance with ASTM F558-13, the vacuum producer shall perform according to values listed in Table 1.

Table 1. Vacuum Producer Water Lift.

Vacuum Cleaner Type	Sealed Water Lift through a 3/4 inch (19.0 mm) Orifice (inches)	Sealed Water Lift through a 1-1/4 inch (31.7 mm) Orifice (inches)
Canister	25 (635 mm)	5 (127 mm)

Manuals: Each cleaner shall be furnished with a manual of operating instructions.

Workmanship: The cleaner and all accessories shall be constructed, assembled, and finished in a manner to assure good quality and performance. The cleaner shall be free from imperfections which may affect durability, serviceability and appearance.

Unit of issue: EA (Each). (One (1) complete system to a package).

NSN: 7910-00-680-8296

POLISHER, FLOOR, ELECTRIC: This commercial type electric floor polisher shall be in accordance with Commercial Item Description A-A-50478B, dated January 21, 1994.

Style 1: Commercial duty.

Size 3: 360 mm minimum diameter brush fiber.

115 Vac, 60 Hz, single phase.

Each unit shall be furnished with three (3) polishing and two (2) scrubbing brushes.

EXCEPTIONS TO THE SPECIFICATION:

- 1. Under the section entitled "Salient characteristics," paragraph 5, delete the last sentence and substitute the following: "The design of the handle shall provide for the positioning and locking of the handle in two (2) different working positions at 45 and 60 degree angles as measured from the floor plane, or shall provide for variable positioning and locking."
- 2. Under the section entitled "Salient characteristics," paragraph 6, delete the second sentence and substitute the following: "The brush block shall be one piece or sectional and shall be laminated wood, solid wood, or molded plastic."
- 3. Under the section entitled "Salient characteristics," paragraph 7, delete the first sentence and substitute the following: "The brush shall be supplied with a metal or plastic plate securely attached to provide a method for attachment to the machine."
- 4. Under the section entitled "Salient characteristics," paragraph 7, delete the last sentence and substitute the following: "The polishing brush fibers shall be made of 60 percent, ±5 percent tampico and 40 percent ±5 percent palmyra; or 100 percent crimped polypropylene filaments of 0.4 mm minimum diameter."
- 5. Under the section entitled "Salient characteristics," paragraph 8, delete and substitute the following:
- "8. Scrubbing brushes. Scrubbing brush construction shall be as specified for polishing brushes except that the scrubbing brush may have a heavy duty metal block instead of the laminated or solid block with plate. The filler shall be 100 percent palmetto fiber or 100 percent bassine fiber."
- 6. Under the section entitled "Quality assurance provisions.," delete paragraphs 1 through 7.
- 7. Delete the paragraph entitled "Contractor certification.," and substitute the following:

Unit of issue – EA (Each).

NSN: 7910-00-680-8297

POLISHER, FLOOR, ELECTRIC: This commercial type electric floor polisher shall be in accordance with Commercial Item Description A-A-50478B, dated January 21, 1994.

Style 1: Commercial duty

Size 4: 430 mm minimum diameter brush fiber

115 Vac, 60 Hz, single phase

Each unit shall be furnished with three (3) polishing and two (2) scrubbing brushes.

EXCEPTIONS TO THE SPECIFICATION:

- 1. Under the section entitled "Salient characteristics," paragraph 5, delete the last sentence and substitute the following: "The design of the handle shall provide for the positioning and locking of the handle in two (2) different working positions at 45 and 60 degree angles as measured from the floor plane, or shall provide for variable positioning and locking."
- 2. Under the section entitled "Salient characteristics," paragraph 6, delete the second sentence and substitute the following: "The brush block shall be one piece or sectional and shall be laminated wood, solid wood, or molded plastic."
- 3. Under the section entitled "Salient characteristics," paragraph 7, delete the first sentence and substitute the following: "The brush shall be supplied with a metal or plastic plate securely attached to provide a method for attachment to the machine."
- 4. Under the section entitled "Salient characteristics," paragraph 7, delete the last sentence and substitute the following: "The polishing brush fibers shall be made of 60 percent, ±5 percent tampico and 40 percent ±5 percent palmyra; or 100 percent crimped polypropylene filaments of 0.4 mm minimum diameter."
- 5. Under the section entitled "Salient characteristics," paragraph 8, delete and substitute the following:
- "8. Scrubbing brushes. Scrubbing brush construction shall be as specified for polishing brushes except that the scrubbing brush may have a heavy duty metal block instead of the laminated or solid block with plate. The filler shall be 100 percent palmetto fiber or 100 percent bassine fiber."

- 6. Under the section entitled "Quality assurance provisions.," delete paragraphs 1 through 7.
- 7. Delete the paragraph entitled "Contractor certification.," and substitute the following:

Unit of issue - EA (Each).

NSN: 7910-00-720-5536

CLEANER, VACUUM, ELECTRIC: Shall be in accordance with the following requirements and characteristics:

Type Upright

Class Small household/commercial

Voltage: 115 Vac, 60 Hz, single phase

UL conformance: Cleaner shall meet the applicable requirements of UL 1017. Evidence of conformance with UL standards shall be a UL label or listing mark, or a certified test report (based on tests conducted within the past two years) from an independent testing laboratory, indicating the vacuum cleaner has passed all applicable tests.

General: Cleaner shall be complete, lubricated, and ready to operate (minor assembly is permitted). The design shall be simple in construction, shall permit easy accessibility to component parts for cleaning, inspection, adjustment, or replacement, and shall provide reliable operation. Similar component parts and assemblies of identical cleaners shall be fully interchangeable. Interchangeability shall not require alteration or modification.

Cleaner shall consist of a housing and handle assembly, vacuum producer assembly, nozzle and agitator assembly, filter assembly, switch, cord assembly, and tools and attachments as specified.

Power switch: Cleaner shall be provided with a quick make-and-break type power switch.

Power cord: The power cord assembly shall have three conductors and a three-prong attachment plug except in double-insulated cleaners, wherein a power cord assembly having two conductors and a two-prong attachment plug shall be permitted. The power cord shall have a minimum length of 30 feet (9.15 m) and measured from the point of exit from the machine to the point of entry into the attachment plug.

Power cord storage: Cleaner shall be provided with a means for coiling, wrapping, or otherwise storing the power cord when the cleaner is not in use.

Filter Assembly: The filter assembly shall filter particulate matter 1 μ m and larger and shall retain this matter for easy disposal. No ingested unfiltered air shall be exhausted from the cleaner. Shall incorporate either disposable or non-disposable dust bags having a minimum capacity of 500 cubic inches (8.19 L). Two (2) dust bags shall be furnished with each cleaner. The bag shall be designed and secured to the cleaner outlet in such a manner that is dust tight and can be expected to hold the bag in place during normal use with the bag empty and with the bag filled. There shall be no sharp projections or edges in the area of dust bag expansion. The bag may be enclosed in a shroud of plastic or other suitable synthetic material.

Housing: The housing shall be equipped with wheels or casters. A dolly with provisions for attachment to the cleaner may be acceptable if the housing is not wheeled. The housing shall be designed such that the cleaner will operate satisfactorily when placed on a stair tread. Shall be provided by a handle or handles that are an integral part of, or are securely fastened to the housing for portability. The housing shall be of durable construction and shall contain the running gear to provide the mobility, the vacuum producer assembly, and an agitator. The frame shall be of rugged construction and shall be enclosed in a shroud of metal or impact resistant synthetic material. Wheels shall be either bearing-supported and permanently lubricated or polymeric self-lubricating and non-marking.

Nozzle and agitator assembly: The nozzle shall be of rugged metal or polymeric construction, and shall effectively funnel litter from the surface being cleaned to the suction channel. The nozzle shall automatically adjust or shall be adjustable in height to compensate for varying pile depths. The agitator shall be provided with high quality bristles and may employ beaters. The bristles or the entire agitator shall be easily replaceable. Shall be provided with a means to uncouple or otherwise disengage the agitator from floor contact when tools and attachments are used. Manual uncoupling shall not require disassembly. The motor shall be rated a minimum of 1/10 hp (74.6 W) and shall operate from the same power source provided by the power connection for the cleaner. The power cord for the agitator shall be securely clamped to or molded into the hose and wand assembly. The power switch for the agitator may be located on the grip.

Handle: The handles shall incorporate strength and rigidity to permit elevating and rotating the agitator assembly about the rear wheels without detectable flexure. The handle shall pivot smoothly from the vertical to a near-horizontal position. A detent or "park" position shall be provided to hold the handle in

the vertical position for storage. Other detents or "work" positions are permitted. Provision for cord storage shall be provided on the handle. The power switch may be located on the handle.

Attachments:

General: Cleaner shall be furnished with one bare floor tool, one crevice tool, one upholstery nozzle, and one brush. Cleaner shall be furnished with one 42-inch (1067 mm) minimum length wand assembly, and one 1-1/4-inch (31.7 mm) minimum inside diameter, 72-inch minimum length hose assembly.

Tool construction: The attachments for the cleaner shall be fabricated from a nonferrous alloy or an impact-resistant synthetic material. Metal tools shall be suitably plated or finished to resist corrosion and prevent marking. All edges shall be rounded and smooth.

Hose construction: The hose shall be fabricated from non-marking materials impervious to attack from common cleaning solutions. A coupling shall be provided on the hose end attaching to the cleaner. The hose shall be able to withstand a minimum compressive load of 150 lb (667 N) applied to any portion of the hose no closer than 12 inches (305 mm) from any fitting by means of parallel flat surfaces having lengths of not more than 3 inches (76.2 mm) parallel to the axis of the hose for not less than 2 minutes. The compressive load shall cause no rupture of any portion of the hose and the resulting hose diameter shall not differ more than 1/4 inch (6.35 mm) from the diameter prior to the compressive load.

Couplings: The engaged wand, hose, and tools shall be able to withstand a tensile force of 25 lb (111 N) for 2 minutes at each coupling without separation. Couplings shall engage and release satisfactorily before and after being subjected to the 25-lb (111 N) tensile force.

Performance:

Noise: The maximum noise generated by the cleaners shall be 85 dbA when tested in accordance with ASTM F1334.

Continuous duty: The motors shall be rated for continuous duty. Continuous duty is defined as constant operation for an 8-hour work day. All lubrication points except sealed bearings shall be visually checked after this run. The lubricant shall be visually examined and shall not contain any metallic particles and lubricant quantity shall be ample. Evidence of galling or similar deficiency or lack of lubrication shall be cause for rejection. The commutator(s) shall be visually examined. There shall be no evidence of burning or pitting.

Vacuum producer water lift: When tested in accordance with ASTM F558, the vacuum producer shall perform according to the following values:

- 10 inches (254 mm) sealed water lift through a 3/4 inch (19.0 mm) orifice
- 4 inches (102 mm) sealed water lift through a 1-1/4 inch (19.0 mm) orifice

Instructions: Cleaner shall be furnished with a operating instructions and maintenance instructions with an Illustrated Parts Breakdown (IPB). The IPB shall identify all components by part number to the lowest repair level.

Unit of issue - EA (Each).

NSN: <u>7910-00-720-5541</u>

CLEANER, VACUUM, ELECTRIC: Shall be in accordance with the following requirements and characteristics:

Type I: Dry pick-up only, enclosed filter

Size: 10 gallons

Voltage: 120 VAC, 60 Hz, single phase

Fire and Casualty Hazards: Vacuum cleaners shall meet the applicable requirements of UL 1017. Evidence of conformance with UL standards shall be a UL label(s) or listing mark(s), or a certified test report (based on tests conducted within the past two years) from an independent testing laboratory acceptable to the Government, indicating the vacuum cleaner has passed all applicable tests.

General Construction: Each cleaner shall be complete, lubricated, and ready to operate (minor assembly is permitted). The design shall be simple in construction, shall permit easy accessibility to component parts for cleaning, inspection, adjustment, or replacement, and shall provide reliable operation. Similar component parts and assemblies of identical model number cleaners shall be fully interchangeable. Interchangeability shall not require alteration or modification.

Wet pickup: Cleaners with wet pickup capability shall be provided with an automatic shutoff mechanism and accessories required to convert the machine from wet to dry pickup.

Power switch and controllers: Each cleaner shall be provided with a quick make and break type power switch.

Power cord: The 12 feet (3.6 m) minimum power cord assembly shall have three conductors and a three prong attachment plug. The cord length shall be measured from the point of exit from the machine to the point of entry into the attachment plug. The end user shall be responsible for providing and installing an attachment plug in accordance with local codes and insurance requirements.

Power cord storage: Each cleaner shall be provided with a means for coiling, wrapping, or otherwise storing the power cord when the cleaner is not in use.

Filtration system: The filtration system shall consist of an enclosed filter and a tank assembly.

Dry pickup: The primary filter shall filter particulate matter 1 μ m and larger and shall retain this matter for easy disposal. This filter may be disposable. No ingested unfiltered air shall be exhausted from the cleaner.

Tank: The tank shall be of stainless steel, plastic, or shall have a durable interior epoxy coating.

Mobility: The cleaner shall have a bearing-equipped wheeled chassis or bearing-equipped self-lubricating polymeric wheels mounted on the tank to provide mobility. Wheels and casters are acceptable in any combination. The cleaner shall be equipped with a handle assembly suitable for use in cleaner movement. The cleaner shall be free-wheeling and easily transportable.

Attachments: The cleaner shall be furnished with one 11-inch (279 mm) minimum length carpet tool, one 14-inch (356 mm) minimum length bare floor tool, one 9-inch (229 mm) minimum length crevice tool, one 48-inch (1220 mm) minimum length wand assembly, and one 1-1/2-inch (38.1 mm) minimum inside diameter, 120-inch (3050 mm) minimum length hose assembly.

Tool construction: The attachments for all cleaners shall be fabricated from a nonferrous alloy or a suitable synthetic material. Metal tools shall be suitably plated or finished to resist corrosion and prevent marking. Bristles, squeegee strips, etc., used in the tools shall be replaceable.

Hose construction: The hose shall be fabricated from non-marking materials impervious to attack from common cleaning solutions. A swivel coupling shall be provided on the hose end attaching to the cleaner. The hose shall be able to withstand a minimum compressive load of 150 lb (667 N) applied to any portion of the hose no closer than 12 inches (305 mm) from any fitting by means of parallel flat surfaces having lengths of not more than 3 inches (76.2 mm) parallel to the axis of the hose for not less than 2 minutes. The compressive load shall cause no rupture of any portion of the hose and the resulting hose diameter shall not differ more than 1/16 inch (1.59 mm) from the diameter prior to the compressive load.

Couplings: The engaged wand, hose, and tools shall be able to withstand a tensile force of 25 lb (111 N) for 2 minutes at each coupling without separation. Couplings shall engage and release satisfactorily before and after being subjected to the 25-lb (111 N) tensile force.

Performance:

Noise: The maximum noise generated by the cleaners shall be 90 dbA for class B cleaners and 85 dbA for all others when tested in accordance with ASTM F1334.

Continuous duty: The cleaner shall be designed for continuous duty. Continuous duty is defined as constant operation for an 8-hour work day. As evidence of the continuous duty capability, the cleaner shall be capable of withstanding a continuous 10-hour run with the orifice wide open. All lubrication points except sealed bearings shall be visually checked after this run. The lubricant shall be visually examined and shall not contain any metallic particles and lubricant quantity shall be ample. Evidence of galling or similar deficiency or lack of lubrication shall be cause for rejection. The commutator(s) shall be visually examined. There shall be no evidence of burning or pitting.

Vacuum producer water lift: When tested in accordance with ASTM F558, the vacuum producer shall perform according to values listed in Table 1.

Table 1. Vacuum Producer Water Lift.

Vacuum Cleaner Type	Sealed Water Lift through a 3/4 inch (19.0 mm) Orifice (inches)	Sealed Water Lift through a 1-1/2 inch (38.1 mm) Orifice (inches)	
Type I	40 (1,020 mm)	6 (152 mm)	

Unit of issue - EA (Each). (One (1) complete system in a package).

NSN: <u>7910-00-820-9898</u>

PAD, FLOOR POLISHING MACHINE: Shall be in accordance with Commercial Item Description A-A-3004, dated December 18, 1996, and Notice 3, dated September 17, 2003 with the following characteristics:

Type I: Nylon, 11/16 inch (17.5 mm) minimum thickness, for operation at up to 350 RPM.

Class 1: Buffing

Size 20: 20 inches

Color: Tan

The pads shall have a scored or removable center hole 3-3/8 +/- 1/8 inch (85.72 +/- 3.18 mm) in diameter.

Unit of issue – BX (Box) (Five (5) pads per box).

NSN: <u>7910-00-820-9912</u>

PAD, FLOOR POLISHING MACHINE: Shall be in accordance with Commercial Item Description A-A-3004, dated December 18, 1996, and Notice 3, dated September 17, 2003 with the following characteristics:

Type I: Nylon, 11/16 inch (17.5 mm) minimum thickness, for operation at up to 350 RPM.

Class 3: Stripping

Size 20: 20 inches

Color: Black

The pads shall have a scored or removable center hole 3-3/8 +/- 1/8 inch (85.72 +/- 3.18 mm) in diameter.

Unit of issue – BX (Box) (Five (5) pads per box).

NSN: <u>7910-00-985-6797</u>

POLISHER, FLOOR, ELECTRIC: Shall be in accordance with Commercial Item Description A-A-50478B, dated January 21, 1994 and the following requirements and characteristics:

Style 2: Hospital, commercial duty "C"

Size 3: 360 mm minimum overall diameter brush fiber

Each unit shall be furnished with three (3) polishing and two (2) scrubbing brushes.

EXCEPTIONS TO THE SPECIFICATION:

- 1. Under the section entitled "Salient characteristics," paragraph 5, delete the last sentence and substitute the following: "The design of the handle shall provide for the positioning and locking of the handle in two (2) different working positions at 45 and 60 degree angles as measured from the floor plane, or shall provide for variable positioning and locking."
- 2. Under the section entitled "Salient characteristics," paragraph 6, delete the second sentence and substitute the following: "The brush block shall be one piece or sectional and shall be laminated wood, solid wood, or molded plastic."
- 3. Under the section entitled "Salient characteristics," paragraph 7, delete the first sentence and substitute the following: "The brush shall be supplied with a metal or plastic plate securely attached to provide a method for attachment to the machine."
- 4. Under the section entitled "Salient characteristics," paragraph 7, delete the last sentence and substitute the following: "The polishing brush fibers shall be made of 60 percent, ±5 percent tampico and

40 percent ±5 percent palmyra; or 100 percent crimped polypropylene filaments of 0.4 mm minimum diameter."

- 5. Under the section entitled "Salient characteristics," paragraph 8, delete and substitute the following:
- "8. Scrubbing brushes. Scrubbing brush construction shall be as specified for polishing brushes except that the scrubbing brush may have a heavy duty metal block instead of the laminated or solid block with plate. The filler shall be 100 percent palmetto fiber or 100 percent bassine fiber."
- 6. Under the section entitled "Quality assurance provisions.," delete paragraphs 1 through 7.

Unit of issue – EA (Each). (One (1) completely assembled polisher and specified brushes).

NSN: 7910-01-084-8854

CLEANER, VACUUM, ELECTRIC: Shall be Pullman-Holt HEPA dry vacuum cleaner, Model 86ASB5D4C (Product Code B160419), or equal, with the following characteristics:

Shall be suitable for use in vacuuming dry asbestos dust and fibers; Shall be a lightweight compact steel dry vac designed to work in tight areas; Mounted on a wheeled dolly with four 2-1/5 inch casters; Minimum 1 hp by-pass motor; Designed for use on nominal 120-Volt circuit; High-efficiency unit with a drop-in HEPA filter with a minimum efficiency of 99.97% at 0.3 microns; Three-stage filter system includes Dacron filter bag, polyester prefilter, and HEPA filter; Designed for use with disposable paper and poly collection bags; Minimum 25 foot long power cord with grounding pin; Shall have a air seal gasket between a clamp-on removable motorhead and collection tank to form a positive lock fit; 5-gallon capacity tank shall be heavy gauge steel with a powder coat finish and carrying handles; Shall include, at a minimum, the following tools: 10 foot long x 1.5 inch diameter crushproof hose with steel fittings, 5-foot two-piece metal wand, 14-inch ABS floor brush tool, a round dusting brush, and crevice tool.



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Unit of issue - EA (Each). (One (1) complete system to a package).

NSN: 7910-01-092-8503

PADS, FLOOR POLISHING: Shall be in accordance with Commercial Item Description A-A-3004, dated December 18, 1996, and Notice 3, dated September 17, 2003 with the following characteristics:

Type III:

Polyester or polyester blended with nylon, 7/8 inch (22.2 mm) minimum thickness, for

spray operation from 150 to 750 RPM.

Class 4:

Polishing

Size 20:

20 inches

Color:

White

The pads shall have a scored or removable center hole 3-3/8 ~1/8 inch (85.72 t3.18 mm) in diameter.

Unit of issue – BX (Box). (Five (5) pads per box).

NSN: 7910-01-156-5306

SCRUBBING MACHINE, FLOOR, ELECTRIC: Shall be Tennant Co., walk behind scrubbing machine, Model 5700-800D ES(with Extended Scrubbing feature), or equal, with the following requirements and salient characteristics:

Electric floor scrubbing machine shall be UL listed. Machine has on-board diagnostics and is 36 volt battery powered system; Operates on a series of six, 6 volt DC batteries; battery charger included.

The recovery tank is part of the solution recycling system with internal filtration and vacuum pick-up. The unit shall incorporate an extended scrubbing feature for up to 2-1/2 hours.

The solution and recovery tanks are manufactured from rotationally molded polyethylene, frame is high impact reinforced fiberglass, with a 3/16 inch aluminum brush housing.

Features:

Corner edge cleaning

Modular construction

Parabolic squeegee; easy change capability

Adjustable operator's console

Infinite variable propelling with on/off brushes and water

Cleans a 32" wide path with twin 16" direct driven brushes

Machine Dimensions/Weight:

Width 34" without squeegee

42" with squeegee

Height 43"

Length 64" Disc

Weight 817 lbs with batteries

Brush/Pad Drive System:

Brush motor horsepower

0.6 hp Disc

Brush RPM

320 RPM Disc

Brush/Pad pressure

0-200 lbs Disc

Solution Delivery System:

Capacity 30 gal

Flow rate 0-1.5 gpm

Recovery System:

Capacity 40 gal

Vacuum motor 0.8 hp

Vac motor CFM 65 cfm

Vac motor waterlift 73 in

Battery System:

Voltage 36 volt

Battery amp hour rating 235 AH@20 hrs

Battery runtime 3.5 hours

Decibel Rating:

Operator's position 75 dBa

Unit of issue – EA (Each). (One (1) complete system in a package).

NSN: <u>7910-01-232-4503</u>

CLEANER, VACUUM, ELECTRIC: Shall be 3M Model Number 497AJM-R, ID No. 80-6103-7375-7, or equal, with the following characteristics:

This portable unit is typically used for high efficiency cleanup of electronic office equipment such as copy machines. Shall be in accordance with the following requirements:

Voltage: 120 Vac, 50/60 Hz

Filter: 3M, Type 2

Amperage: 5.0 amps

Motor: 1.0 hp

Vacuum Tool Case Dimensions:

Length 18-1/4 inches

Width 14-1/4 inches

Height 9-5/8 inches

Table 1. Accessories to be Furnished with Vacuum.

Quantity Description of Accessory.

1 each	Type 2 filter
1 each	detachable power cord
1 each	32 inch stretch hose
1 each	crevice brush & nozzle
1 each	dusting brush
1 each	needle nose nozzle
1 each	curved wand nozzle
1 each	storage case w/2 closure latches

М	otor:
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The continuous duty rated motor, switches and all associated controls shall be designed to operate from a 110-120 Vac, 50/60 Hz, single phase power supply. The motor shall have an internal thermal breaker that opens at 221 degrees F, to prevent overheating.

The vacuum shall be UL listed or shall be certified by a testing laboratory acceptable to the Government, as conforming to UL 1017, "Vacuum Cleaners, Blower Cleaners, and Household Floor Finishing Machines", Standard for Safety.

Power Cord:

Shall be designed with an equipment grounding conductor and grounding plug(s). Shall incorporate one hooded end female receptacle, on the end which directly plugs into the side of the tool case. The other end of the power cord shall be a standard three-way, 115 Vac, male plug.

Vacuum Tool Case:

The portable vacuum cleaner is designed and shall be permanently mounted in a high impact, plastic or equivalent storage case. The inside cover of the case shall have an accessory door, with fastener(s), to store all accessories, power cord, specified in Table 1.

The storage case will have two (2) sturdy release latches mounted on the cover/lid and a carrying handle. The handle shall be permanently attached to the case. The complete vacuum and tool case assembly, with all accessories stored and enclosed, shall withstand a total carrying capacity of a minimum of 17 pounds.

One end of the case shall incorporate vacuum inlet and exhaust ports port one integral power switch, a detachable power cord receptacle that plugs into the case. The inlet port shall be a compatible size with the hose and attachments. A vacuum inlet plug shall be furnished to prevent foreign objects from entering the vacuum port, when unit is not in use.

Shall be designed with a high quality filtration system, that incorporates a plastic type, toner collection canister, which fits directly in the tool case, to eliminate any toner blow-by and possible health hazard.

Tools:

The tools shall be constructed of materials that eliminate electrical or static discharge. The tools shall be designed to prevent component damage and any potential danger of contact.

Installation and Operating Instructions:

The vacuum shall include tool case instructions, vacuum operating instructions/manual and a replacement parts listing for each unit.

Workmanship:

The vacuum cleaner, tool case, power cord and all accessories shall not contain any defects that will affect fit, form, functional or operational requirements. There shall be no defects that will create a safety or hazardous condition to personal or equipment.



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Unit of Issue: EA (Each). (One (1) each complete system).

NSN: 7910-01-363-6975

PAD, FLOOR POLISHING MACHINE: Shall be a polyester and natural hair blend, combo burnishing pad, 20 inch diameter, center hole diameter 3.5 inches, color ivory, thickness 11/16 inch, minimum operating speed of 1,500 RPM.

Unit of Issue: BX (Box). (Five (5) pads in a box).

NSN: <u>7910-01-364-2170</u>

POLISHER, FLOOR, ELECTRIC: For applications requiring a lower (10 amp) current draw. Shall be in accordance with the following salient characteristics:

Design type:	single brush
Pad driver:	flexible
Brush speed (minimum):	1000 RPM
Brush diameter:	20 inches
Electrical:	120 Vac, 60 Hz, *15 A startup, 10 A operation
Motor type:	rectified dc
Wheels:	Two or four non-marking wheels with sufficient diameter for easy transport
Chassis:	cast aluminum
Apron:	12 gage metal (chromed)
Safety trigger lock:	dual
Trigger:	poly/rubber non-conductive
Axle:	full
Pad contact:	full/adjustable
Bumper guard:	full-1 piece
Power cord length (minimum) :	50 feet
Wheel adjustment:	yes

*The electrical current shall not exceed 15.0 A during startup. After startup, during normal operation under full pad contact, the electrical current shall not exceed 10.0 A.

Unit of Issue - EA (Each). (One (1) complete assembled polisher).

NSN: <u>7910-01-386-3666</u>

POLISHER, FLOOR, ELECTRIC: Shall be Cavalier Inc., electric floor polisher/burnisher Model Protector 9000, or equal, with the following characteristics:

Floor polisher Polished aluminum or triple chrome plated steel w/non-marking bumper

Handle Heavy duty solid aluminum or chrome plated handle

Floor pad diameter: 20 inch

Levers: Heavy duty w/dual safety switch levers

Cord Jacket Voltage: 600 volt

Motor Voltage: 115 volt

Power cable/cord: 14/3 with integral ground fault circuit interrupter

Power cable length: 50 ft. minimum

Pad speed rating: 1100 RPM

Unit of Issue: EA (Each). (One (1) complete unit in a package).

NSN: <u>7910-01-420-0590</u>

CLEANER, VACUUM, ELECTRIC, HOUSEHOLD: Household upright vacuum cleaner with onboard attachments shall be in accordance with the following characteristics and requirements:

Power source: Shall operate on 120 Vac, 60 Hz, single phase

Motor amperage: 7.0 amp minimum

Power cord: 20 foot min with handle or housing cord storage

Carpet height: Four adjustable height positions minimum

Adjustable handle: Smooth pivot from vertical to a near horizontal position

Agitator: Brush roller

Disposable filter bag: Included

Onboard attachments: Included

Peak noise level: 84 dBa, maximum

The vacuum shall operate with type A, C, Sub-3, U, or other commercially available (nonproprietary) disposable paper filter bag.

Onboard attachments: Shall include as a minimum a 4 foot crush resistant hose, crevice tool, upholstery nozzle, and dusting brush (upholstery nozzle and dusting brush may be combined into a single attachment). The vacuum cleaner shall be designed such that the hose connects to the upper part of the chassis by means of an accessory tool door, or some other means.

UL conformance: Vacuum cleaners shall meet the applicable requirements of UL 1017. Evidence of conformance with UL standards shall be a UL label or listing mark, or a certified test report from an independent testing laboratory acceptable to the Government, indicating the vacuum cleaner has passed all applicable tests.

Unit of Issue: EA (Each). (One (1) package consisting of vacuum cleaner, filter bag, and accessories listed in "Onboard attachments").

NSN: 7910-01-423-9525

CLEANER, VACUUM, ELECTRIC: Shall be Metropolitan Vacuum Cleaner Co. Inc., DataVac Pro Series Model number, MDV-1BA or equal, with the following characteristics and requirements:

Lightweight "hand-held" vacuum cleaner/blower power unit, designed for cleaning computers, printers and other electronic office equipment. Shall be UL listed.

Features:

Construction Steel

Motor 1 speed

Volts 120

Peak HP 0.75

CFM 70

AMPS 4.0 nominal

Bag Disposable paper

Weight 3 lbs

Size 16" x 4" x 4"

Accessories:

19" flexible hose

Pin pointer nozzle

Crevice tool

Dust brush

Four-piece micro-cleaning tool kit

Shoulder strap

5 disposable bags



Image is representational and intended as a guide.

Unit of Issue: EA (Each). (One (1) complete system in a package).

NSN: 7910-01-453-8488

CLEANER, VACUUM, ELECTRIC: Shall be Nilfisk-Advance, Compact Vac with HEPA filter and back pack frame, P/N 01728132, or equal, with the following characteristics:

Shall be a lightweight portable electric vacuum cleaner with HEPA filtration and back-pack frame; Designed for easy maneuverability and operation in confined areas; Adjustable shoulder straps and waist belt designed for even weight distribution; Ball-joint couplings for 360 degree freedom of movement without hose splitting and cracking; Shall have three-stage filtration system: Disposable paper bag, microfilter, and HEPA exhaust filter; HEPA exhaust filters shall be 99.97% efficient at 0.3 microns; HEPA filters shall be DOP-tested and certified; Features a motor thermal protection device.

Voltage: 110-120

Amps: 9

Power: 1100 watts

Waterlift: 102 inches

Airflow: 87 cfm

Air performance: 250 air watts

Tank capacity: 1.0 gallons

Paper bag:

capacity 1.0 gallons

HEPA filter:

Area 1151 square inches

Unit height: 23 inches

Unit width: 22 inches

Unit depth: 15.5 inches

Weight w/ back pack: 17 lbs

Cord length: 30 feet

Accessories: Flexible hose kit

Combination floor nozzle



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Unit of Issue: EA (Each). (One (1) complete system).